# **Atlantic Richfield Company**

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May 3, 2012

#### **CERTIFIED - RETURN RECEIPT REQUESTED**

Ms. Jere Johnson Remedial Project Manager U.S. Environmental Protection Agency Region 9 75 Hawthorne Street, SFD-9-1 San Francisco, CA 94105

Subject:

April 2012 Monthly Report, Yerington Mine Site, Lyon County, Nevada: Administrative Order for Remedial Investigation and Feasibility Study (RI/FS), CERCLA Docket No. 9-2007-0005; Administrative Order on Consent, CERCLA Docket No. 09-2009-0010

Dear Ms. Johnson:

Pursuant to the above referenced orders issued by the U.S. Environmental Protection Agency - Region 9 (EPA), Atlantic Richfield Company (ARC) has prepared this April 2012 monthly report for RI/FS and Operations and Maintenance (O&M) activities at the Yerington Mine Site (Site).

# **April 2012 Activities**

#### Site Security and O&M Activities

- Continued routine Site O&M, security and bird deterrent activities. Security cameras at various locations (e.g., Main and Arimetco gates, entrances to buildings) indicated no activity of concern.
- "Wind Dancers" were operated at the Slot Pond, the Pumpback Well System (PWS) Pond, and the Lined Evaporation Pond. Propane cannons were operated at the Arimetco Fluid Management System (FMS) ponds (with the exception of the VLT Pond, as directed by EPA). Locations of "Wind Dancers" and bird deterrent flags were rotated every two weeks, or as field observations dictated, to lessen the possibility of birds becoming habituated to these deterrents. The bird guard towers remained active due to water in the PWS Pond. Start/stop times on all cannons continued to be adjusted to reflect changing timing of sunrise and sunset.
- Water levels in PWS Evaporation Pond cells: North Cell = 0.0 feet; Middle Cell = 0.78 feet; South Cell = 2.58 feet (water in the two cells primarily from the November 2011 aquifer test).
- Arimetco FMS pond levels: Phase 1 Pond = 3.65 feet; FMS Evaporation Pond = 8.10 feet; VLT Pond = 8.09 feet; Slot 2 Pond = 14.48 feet. Approximately 124,779 gallons were transferred from the VLT Pond to the FMS Evaporation Pond. Leak detectors were monitored throughout the Site. A total of 42,580 gallons of solution were pumped from the leak detectors in April, bringing the cumulative 2012 total up to 150,817 gallons. VLT Pond leak detection activity was managed by maintaining fluid levels below 8.5 feet. Remaining freeboard in the FMS Evaporation Pond at the end of April was 2.06 approximately feet. Combined drain-down from all Arimetco heap leach pads (HLPs) averaged 8.88 gallons per minute (gpm) in April. See attached monitoring data.
- A small transfer pump from the VLT Pond was removed for inspection and maintenance. The bearings in the pump were found to have failed, and a replacement pump was ordered.
- Initiated the compilation of data for inclusion in the 2011 Annual O&M Report for the Arimetco FMS.



Ms. Jere Johnson Yerington Monthly Report May 3, 2012 Page 2 of 4

# **April 2012 Activities - Continued**

#### Other Site Activities

- B.V. Nevada personnel continued with demolition and salvage activities, which are expected to continue into May.
- Southwest Gas removed the gas meter located adjacent to the former assay lab. Termination of service was done for safety purposes and to facilitate demolition of the structure by B.V. Nevada.
- Site personnel continued to evaluate two-way radio coverage for the Site.
- Singatse Peak Services (SPS): 1) continued with modifications and improvements to structures on Site; and 2) initiated drilling activities on the HLPs.
- Desert Engineering completed road grading and related activities during the week of April 23.
- Continued to compile aerial mapping data into Site and off-Site contour maps and aerial photos.
- Conducted bird identification refresher training for Site O&M personnel on April 11.
- Initiated an update to the Site-Wide Health and Safety Plan (HASP).

## Site Characterization Activities

- Monthly groundwater elevation measurements were obtained April 23-25.
- A pit lake water elevation of 4228.113 feet above mean sea level was recorded on April 25, 2012 from the pressure transducer, an increase of 0.277 feet since March 25, 2012. The pit lake elevation has risen 3.160 feet since April 25, 2011.
- Continued meteorological monitoring at the AM-6 location including wind speed/direction, temperature, relative humidity, barometric pressure, precipitation and solar radiation. Performed the semi-annual calibration of the Site meteorological station.
- Received an access agreement from the new owner of DW-76 for domestic well sampling. Retransmitted an access agreement to the owner DW-77, which is still pending.
- Five residences (DW-3, DW-15, DW-30, DW-178 and DW-193) were added to the Bottled Water Program. Responses from three residences (DW-92, DW-194, and DW-195) that were eligible for bottled water are pending.
- Initiated the compilation of data for the 1Q 2012 Domestic Well Monitoring Report (DWMR).
- Continued data compilation for inclusion in the Annual 2011 Groundwater Monitoring Report (GMR). Initiated the compilation of data for the 1Q 2012 GMR.
- Remaining field activities associated with the On-Site Monitor Well Program were completed in April, and all laboratory analytical data for zonal samples have been received. Dedicated bladder pumps were installed in the following wells: B/W-56S, B/W-57D1, 57D4, 57I and 57S; and B/W-58B, 58D3, and 58I. Pressure transducers were installed April 23, 2012 in B/W-56S, B/W-57D1, B/W-57S and B/W-58D3. Continued the compilation of field and laboratory data associated with the On-Site Monitor Well program, and initiated the Data Summary Report.
- Tri-State completed the surveying of all new monitor wells, and completed the re-surveying of all remaining active monitor wells.
- Submitted on April 18, 2012 preliminary draft responses to EPA comments dated February 7, 2012 on the Draft Background Groundwater Quality Assessment dated September 28, 2011.
- Completed and submitted the Aguifer Test Data Summary Report dated April 19, 2012.
- Continued the compilation of responses to EPA comments dated March 15, 2012 on a technical memorandum dated January 5, 2012 that described publically available information (underground and surface water rights; groundwater elevation data) in an area northeast of the Site.
- Continued the supervision of Hazen Laboratory in preparation for upcoming aquifer solids testing.
- Continued to prepare components of the revised Site-Wide Groundwater Operable Unit (OU-1) Remedial Investigation Work Plan including appendices related to calculation of soil-water partition coefficients, surface water data and hydrologic tracer data.
- In a letter dated March 22, 2012, in response to an EPA letter dated March 13, 2012, ARC agreed to assume the technical lead in the remedial investigation of potential Arimetco HLP impacts to Site soils and groundwater.
- Routine database management activities and support of Site investigations and reports.

## Planned May/June 2012 Activities

### Site Security and O&M Activities

- Continue routine Site O&M, security and bird deterrent activities.
- As necessary, transfer fluids from the VLT Pond to the FMS Evaporation Pond to reduce or eliminate leak detector activity associated with the VLT Pond.
- As necessary, continue discussions with EPA, NDEP and SPS regarding FMS repairs.
- Continue to compile information for inclusion in the 2011 Annual FMS O&M Report, and submit the report.
- Submit the Data Summary Report for the VLT Transformer Soils Characterization and Removal Work Plan. Ship the excavated soils and concrete slab materials associated with the former VLT Transformer to an approved landfill, and fill in the excavation.

### Other Site Activities

Complete the compilation of aerial survey-based photos and maps.

### Site Characterization Activities

- Continue groundwater elevation and pit lake level measurements, and meteorological monitoring.
- Continue the Bottled Water Program.
- Continue the compilation of data for inclusion in the 2Q 2012 GMR and DWMR.
- Complete the compilation of data for inclusion in the 2011 Annual GMR, and submit the GMR.
- Prepare for, and conduct, the 2Q 2012 groundwater and domestic well monitoring events. The 2Q 2012 groundwater monitoring event will include the comprehensive hydrologic tracer sampling activity.
- Compile aquifer solids test materials for lab testing, starting in June.
- Discuss with EPA the preliminary responses to EPA comments on the draft BGQA.
- Discuss the preliminary responses to EPA comments on the tech memo that described publically available surface and groundwater information north of the Site.
- Continue the compilation of information for inclusion in the revised Groundwater RI Work Plan.
- Meet with EPA in early May to discuss the scope of work associated with the characterization of impacts to subjacent soils and groundwater from the Arimetco HLPs, and the planned approach to revising the Site-Wide Groundwater RI Work Plan.
- When available, review EPA's draft Process Areas (OU-3) RI Work Plan and data quality objectives for the Wabuska Drain (OU-7) RI Work Plan.

Please contact me at (714) 228-6774 or via e-mail at <a href="mailto:jack.oman@bp.com">jack.oman@bp.com</a> if you have any questions or comments about the April 2012 monthly report.

Sincerely,

Jack Oman Project Manager

Attachments

Ms. Jere Johnson Yerington Monthly Report May 3, 2012 Page 4 of 4

Dave Seter, EPA - via electronic mail cc: Roberta Blank, EPA - via electronic mail Andrew Helmlinger, EPA – via electronic mail Tom Dunkelman, EPA - via electronic mail Greg Lovato, NDEP - via electronic mail Tom Olsen, BLM - via electronic mail Dan Newell, City of Yerington - via electronic mail Phyllis Hunewill - via electronic mail Virgil Arellano, Lyon County Commissioner - via electronic mail Richard Faber, Lyon County Facilities Engineering - via electronic mail Tom Grady, Nevada State Assembly – via electronic mail Jim Sanford, MVEC - via electronic mail Deborah Dunn, YPT - via electronic mail Chairwoman Howard, YPT - via electronic mail Dietrick McGinnis, McGinnis and Associates - via electronic mail Tom Bowden, Ridolfi, Inc. - via electronic mail Chairwoman McFalls, WRPT - via electronic mail Vicky Moyle, WRPT - via electronic mail Ron Halsey, Atlantic Richfield Company – via electronic mail James Lucari, Atlantic Richfield Company – via electronic mail Marc Ferries, Atlantic Richfield Company - via electronic mail Brian Johnson, Atlantic Richfield Company – via electronic mail John Batchelder, EnviroSolve – via electronic mail Jim Chatham, Atlantic Richfield Company - via electronic mail Rich Curley, Curley and Associates, LLC - via electronic mail Bill Duffy, Davis Graham & Stubbs - via electronic mail Tom Patton, Singatse Peak Services, LLP - via electronic mail Steve Dischler, Singatse Peak Services, LLP - via electronic mail George Eliopulos, Singatse Peak Services, LLP – via electronic mail Taurus Massey, Singatse Peak Services, LLP – via electronic mail David Peri, Peri and Sons - via electronic mail Ken Greene, CH2M Hill - via electronic mail Victor Early, Tetra Tech – via electronic mail Colin Lee, Tetra Tech - via electronic mail

> Peggy Pauly, YCAG – via electronic mail Lyon County Library System Central